National Aeronautics and Space Administration

NASA environmental and energy conference 08

EMS Best Practices

Sustaining Mission Success

Artist's conceptual rendering

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EMS Best Practices

- **Aspects and Impacts**
  - Defining and prioritizing impacts and benefits in terms that are important to program managers (e.g., cost/delay to mission) is more effective
  - Utilizing an "EMS Steering Committee" comprised of members of different organizations helps to foster communication and accurately evaluate aspects/impacts

- **Objectives, Targets, and Programs**
  - A concise environmental management plan with clear objectives and targets and responsibilities is more effective

EMS Best Practices

- **Legal Requirements:**
  - Use a variety of sources, in addition to RRAC Principle Center, to assess legal requirements and to disseminate the information to appropriate organizations
  - Contractor provides quarterly regulatory updates that may impact Center
  - A good documented procedure to access, review, identify and document legal and other requirements more effective

EMS Best Practices

- ## **Structure & Responsibility**

  - – Using mechanisms that are already in place helps ensure integration of environmental into programs, projects and processes

  - – Project Management Branch created a liaison position within their organization to streamline the interface with Safety, Health, and Environmental

  - – Program and project offices have integrated preparation of Preliminary Environmental Survey (PES) into the overall planning process

EMS Best Practices

- **Documentation / Records:**
  - Comprehensive documentation of environmental requirements and procedures improves performance
  - Easily accessible document / records management system improves communication and access to environmental regulatory information and requirements, e.g., Sharepoint, web site
  - Documented procedures for records management improves environmental recordkeeping

EMS Best Practices

- **Communication:**
    - Use of a variety of communication tools improves internal and external communications, e.g., Center newsletter, Heads-up, emails, websites
    - Environmental Quick Reference Guide provides quick, easily accessible source for environmental information and points-of-contact
    - Public awareness and outreach benefits with strong support of the PAO
    - EMS SharePoint Website is an excellent program communication tool
    - Environmental Communication procedure provides clear process for dissemination of information and communication to internal and external parties

EMS Best Practices

- **Operational Controls**
  - Environmental Desk Guides focus environmental requirements based on job specific duties
  - Fire Department reviews bills of lading prior to allowing hazardous materials onsite
  - RIMS excellent system for tracking of regulatory requirements and chemical inventory
  - Documented procedures for operational controls improves performance

EMS Best Practices

- **Monitoring, audits & corrective action**
  - Improved metrics and analysis helps environmental program personnel to better allocate scarce resources
  - Annual internal and external EMS audits provide a thorough review of the EMS and its processes
  - Dedicated EMS Audit Manager improves results
  - Comprehensive, clearly delineated corrective action system improves results

EMS Best Practices

- **Management review:**
  - Semi-annual reviews resulted in senior management being well aware of the environmental issues
  - Management review is a powerful tool to obtain support and resources for improvement of environmental performance
  - Senior management support has been key to the success of the EMS

EMS Best Practices

- **Additional Input**